highly active antiretroviral therapy (HAART) initiation. To evaluate TB risk among HIV infected contacts is needed for countries with moderate TB incidence for future expansion of LTBI treatment in TB control program.
Methods: We conducted a cohort study using contacts of active TB patients from Taiwan TB registry during 2008—2012. All contacts were followed till December 31, 2013 for developing active TB. We performed cross-link with the contacts and both the nationwide HIV surveillance system and national health insurance (NHI) claims database for other medical condition as risk factors of TB. We used Cox proportional hazard model to estimate the hazard ratio (HR) and 95% confidence interval (CI) for the association of TB risk and HIV status among contacts.
Results: A total of 2328 (0.51%) active TB cases among 456,813 contacts were found in our study. The overall incidence of contacts to develop active TB was 162.76/100,000 person-year after the mean follow-up duration of 3.1 years. The TB incidence among HIV infected contacts was 574.8 (266.9—1091.0)/100,000, which is 3.54 (1.77—7.09) times of the risk among non-HIV infected contacts. After adjusting potential confounders, HIV co-infection (aHR: 2.89, 95% CI: 1.44—5.81) was independently associated with active TB. Compared with non-HAART users, contacts receiving HAART had lower risk to develop active TB but not statistically significant ($p = 0.512$, log-rank test).
Conclusion: Contacts with HIV co-infection whether using HAART or not was needed to be prioritized for contacts investigation, LTBI evaluation and treatment.

OS 1-4

CESAREAN SECTION SURGICAL SITE INFECTION CAUSED BY *MYCOBACTERIUM MASSILIENSE*

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Purpose: From August 1, 2012 to October 31, 2012, three patients whose C-section surgical sites infected by *Mycobacterium massiliense* were reported. We began an environmental surveillance and investigated the infection focus for stopping further diseases clustering.
Materials: Our team of PCI investigated the whole process of preparedness and disinfection of C-section. Environmental surveillance was performed by ICPs. Further molecular epidemiological tool such as PFGE will be applied for the investigation of clonality.
Results: No *M. massiliense* was cultivated from the environmental specimens during this surveillance. After molecular analysis by PFGE, these 3 clinical isolates were identified as the same clonality (Figure). It means that these strains perhaps came from a common source.

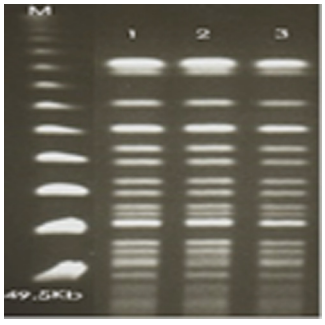

Figure PFGE of three *Mycobacterium massiliense* isolates.

Conclusions: A single clonality of these three isolates represented a probable common infection source. After implementation of measures of PCI, these medical materials became single-used. Until August 31, 2014, there were no more new NTM related C-section surgical site infection.

OS 1-5

FIRST REPORT OF ONE NEGLECTED HYPERVIRULENT (HYPERMUCOVISCOUS) AND PAN-SUSCEPTIBLE *KLEBSIELLA PNEUMONIAE* ST86 STRAIN CAUSING FATAL INFECTIONS IN CHINA

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Purpose: In order to identified a hypervirulent (hypermucoviscous) and pan-susceptible *K. pneumoniae* ST86 strain of serotype K2, responsible for two lethal bacteremia cases in a university teaching hospital in China.
Methods: We cultured and isolated *K. pneumoniae* from blood and/or sputum samples from the 2 patients, which were labeled as *Kp523* and *Kp562*, respectively. A combination of Pulsed Field Gel Electrophoresis (PFGE) and Multilocus sequence typing (MLST) methods was used to analyze and compare molecular genetic characteristics of the two isolates. PCR was performed to determine the presence of the specific *wzx* gene for capsule serovar K1, K2, *rmpA* and *magA*.
Results: MLST typing revealed that the two strains belonged to same ST86. PFGE typing analysis further showed that the two isolates displayed the same PFGE profiles. We found that the two string test positive isolates were also *rmpA* positive but *magA* negative using specific PCR primers targeting *rmpA* and *magA*.
Conclusions: For the first time, we reported a distinct hypervirulent and pan-susceptible *K. pneumoniae* serovar K2 ST86 strain, responsible for fatal infections in a Chinese university teaching hospital.

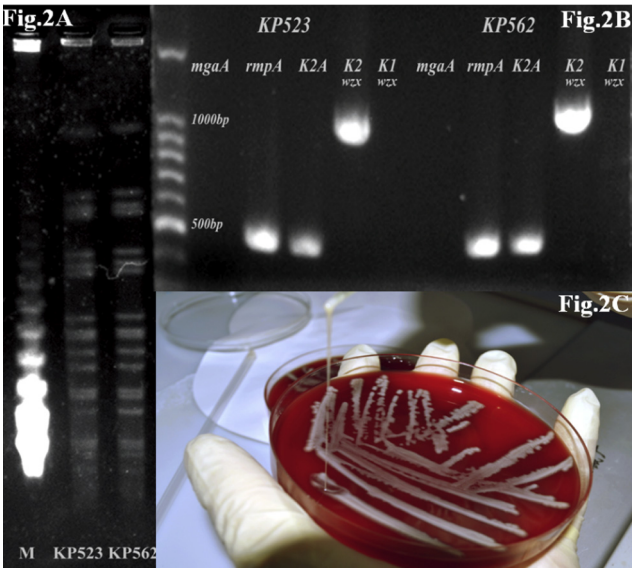

Figure Characteristics identification of *KP523* and *KP562*.

OS 1-6

RESEARCH IN THE VIRULENCE OF *CANDIDA*

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Purpose: Detecting the virulence's level of lecithinase and hemolysis in Candida, insight the correlative factors about the virulence of Candida.